

CLAIMS

What is claimed is:

1. A method of:
encoding a data set into a plurality of coding units, with each coding unit being progressively encoded to sequentially present most significant data followed by less significant data,
packetizing each of the plurality of coding units to provide transmissible data packets, and
marking each transmissible data packet from the same coding unit to allow time based selective flushing of those data packets carrying less significant data.
2. The method of claim 1, further comprising time stamping to mark transmissible data packets from the same coding unit, and flushing those queued time stamped transmissible data packets after a predetermined time if all transmissible data packets for the same coding unit are not transmitted within that predetermined time.
3. The method of claim 2, wherein flushing further comprises flushing a transport layer, flushing a link layer, and flushing a media access control (MAC) layer of a data handling protocol stack.
4. The method of claim 1, further comprising maintaining a data queue for temporarily holding coding units stored in the data queue as time stamped data packets having the same time stamps, and interrupting data packet transmission if data packets belonging to a coding unit in the data queue are not transmitted within a preset time period.

5. The method of claim 1, further comprising transmitting progressively coded transmissible data packets using an asynchronous reliable packet communication protocol.
6. The method of claim 1, further comprising transmitting progressively coded transmissible data packets over a wireless physical layer.
7. The method of claim 6, further wherein data packets are asynchronously transmitted using a connectionless protocol.
8. An article comprising a computer-readable medium, which stores computer-executable instructions, the instructions defined to cause a computer to:
- progressively code a data set into a plurality of coding units, with each coding unit carrying data sequentially arranged in order of importance, with most significant data being readable before less significant data,
 - packetize each of the plurality of coding units to provide transmissible data packets, and
 - mark each transmissible data packet from the same coding unit to allow time based selective flushing of those data packets.
9. The article comprising a computer-readable medium which stores computer-executable instructions of claim 8, wherein the instructions further cause a computer to time stamp data packets to mark packets derived from the same coding unit, and flush those time stamped data packets after a predetermined time if all data packets for the same coding unit are not transmitted within that predetermined time.
10. The article comprising a computer-readable medium which stores computer-executable instructions of claim 9, wherein the instructions further

cause a computer to flush a transport layer, flush a link layer, and flush a media access control (MAC) layer of a data handling protocol stack.

11. The article comprising a computer-readable medium which stores computer-executable instructions of claim 8, wherein the instructions further cause maintenance of a data queue for temporarily holding coding units as time stamped data packets having the same time stamps, and interrupting data packet transmission if data packets belonging to a coding unit in the data queue are not transmitted within a preset time period.

12. The article comprising a computer-readable medium which stores computer-executable instructions of claim 9, wherein the instructions further cause transmission of progressively coded transmissible data packets over a wireless physical layer.

13. The article comprising a computer-readable medium which stores computer-executable instructions of claim 9, wherein the instructions further cause encoding of image data using transform coding.

14. A digital transmission system comprising:

an encoding unit to progressively code a data set into a plurality of coding units, with each coding unit carrying data sequentially arranged in order of importance, with most significant data being readable before less significant data, and

a marking module to mark each transmissible data packet from the same coding unit, allowing time based selective flushing of those data sets.

15. The digital transmission system of claim 14, further comprising a decoding module to decode transmitted data packets.

16. The digital transmission system of claim 15, wherein the flushing module flushes data packets in a transport layer, flushes data packets in a link layer, and flushes data packets in a media access control (MAC) layer of a data handling protocol stack.

17. The digital transmission system of claim 14, further comprising a transmission queue for temporarily holding time stamped data packets having the same time stamps, and interrupting data packet transmission if the transmission queue is not filled within a preset time period.

18. The digital transmission system of claim 14, further comprising a wireless transmission unit to transmit progressively coded transmissible data packets over a wireless physical layer.

19. The digital transmission system of claim 14, further comprising a transform coding module for encoding image data.

20. A method of:

providing a Logical Link Control and Adaptation Protocol (L2CAP) module to packetize Transport Packets created by a Transport Layer module into L2CAP packets for a defined L2CAP channel, and

flushing the L2CAP packets from a data queue after a predetermined time by issuing a Flush Request for the L2CAP channel from the Transport Layer module, the L2CAP module removing any remaining packets associated with the L2CAP Channel from the data queue.

21. The method of claim 20, further comprising issuing an HCI_Flush command to a Link Manager module connected to the L2CAP module.

22. The method of claim 20, wherein the data queue is a virtual queue that contains pointers to memory locations where Transport Packets are stored.